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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,174	01/02/2002	Brian C. Ramey	BEA920010036US1	9102
49056 7590 02/08/2007 LIEBERMAN & BRANDSDORFER, LLC 802 STILL CREEK LANE GAITHERSBURG, MD 20878			EXAMINER KOROBOK, VITALI A	
			ART UNIT 2155	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			02/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/040,174	RAMEY, BRIAN C.	
	Examiner	Art Unit	
	Vitali Korobov	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-16 and 18-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-16 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

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Response to Amendment

1. This Office Action is in response to the amendment filed 06/08/2006. No claims were amended. Claims 1-12, 14-16 and 18-22 are pending in this Office Action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2 and 4-9 are rejected under 35 U.S.C. 102(e) as being anticipated by the U. S. Patent No. 6,498,791 B2 issued to Pickett et al., hereinafter Pickett.

Regarding claim 1, Pickett teaches a method comprising: (a) routing communication from a first partition of a computer system, formatted for headless communication (Col. 82, lines 2-5. See also claim 1 of Pickett), to a service processor formatted for headless communication, wherein said service processor is adapted to provide support and maintenance of said computer system (Fig 3, intelligent switch/mux 74 intelligently routes control, support and maintenance commands to headless computer system. See also the abstract and col. 3, lines 1-24); and (b) routing

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communication from said service processor to a remote console (Fig. 15 - Remote Management Console), wherein said service processor includes a channel formatted for headless communication (Fig. 16B, right half of the screen shot - channel configuration for communication with the headless computer system are by definition formatted for headless communications).

Regarding claim 2, Pickett teaches the method of claim 1, further comprising providing management commands to said partition through said service processor (Fig. 3, service processor 74 connected to TDM Bus 78, which, as depicted on Fig. 3A, comprises a control bus 92. See also col. 2, lines 49-67).

Regarding claim 4, Pickett teaches the method of claim 1, further comprising the step of routing communication from one of a plurality of partitions to said service processor through a multiplexer (Col. 3, lines 1-24. See also Fig. 3, item 74).

Regarding claim 5, Pickett teaches the method of claim 4, further comprising the step of selecting a specific channel of one of said plurality of partitions for communication between said multiplexer and said service processor through a multiplexer control (Col. 9, lines 14-40).

Regarding claim 6, Pickett teaches the method of claim 4, further comprising said remote console providing a management command to one of said plurality of partitions through said service processor and said multiplexer (Remote Management Console (Fig. 15), provides management commands through service processor and multiplexer

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(Fig. 3, item - 74 - switch MUX, connected to TDM bus 78, comprising, as per Fig. 4, a control bus 92).

Claim 7 is rejected in view of the above rejection of claim 1. Claim 7 is essentially the same as claim 1, except that it sets forth the invention as a system rather than a method, as does claim 1.

Claims 8 and 9 are rejected in view of the above rejection of claims 4 and 5, respectively. Claims 8 and 9 are essentially the same as claims 4 and 5, except that they set forth the invention as a system rather than a method, as do claims 4 and 5.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 12, 15, 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pickett in view of the above rejection of claim 1.

Claim 12 is different from claim 1 essentially in that it has a limitation directed to an additional second partition, functionally analogous to the first partition. Pickett discloses the claimed limitations of claim 1, except for a second partition functionally analogous to the first partition. Therefore, it would have been obvious to one having

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ordinary skills in the art at the time the invention was made to add a second partition, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. (*St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8).

Regarding claim 15, Pickett teaches the method of claim 12, further comprising the step of selecting one of said partitions for communication from said multiplexer to said remote console through a multiplexer control (Col. 3, lines 1-24. See also Fig. 3, item 74).

Claim 16 is rejected in view of the above rejection of claim 12. Claim 16 is essentially the same as claim 12, except that it sets forth the invention as a computer system rather than a method, as does claim 12.

Regarding claim 18, Pickett teaches the method of claim 16, further comprising a multiplexer control to select one of a plurality of partitions for communication with said remote console (Col. 9, lines 14-40).

Regarding claim 19, Pickett teaches the method of claim 16, wherein said multiplexer receives and transmits commands with said remote console through an Ethernet connection (Col. 6, lines 41-49).

4. Claims 3, 11, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pickett in view of the U. S. Patent Application Publication No. 2003/0097553 by Frye, hereinafter Frye.

Regarding claim 3, Pickett teaches the method of claim 1, wherein said management commands support in-band and out-of-band modes of operation (As per

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col. 1, lines 49-55, for transmission of management commands Pickett employs time-division multiplexing, rather than frequency multiplexing, and therefore, teaches in-band communications. As per col. 43, lines 28-32, Pickett also teaches out-of-band management access).

Pickett does not explicitly teach pre-boot mode of operation.

However, Frye in analogous art, directed to booting up headless appliances in pre-booting execution environment (PXE), teaches pre-boot mode of operation (Frye, [0021]).

Therefore, it would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate the teachings of Frye regarding pre-boot mode of operation into the teaching of Pickett to improve the process of bringing headless server appliances into the network and make it less cumbersome (Frye, [0008]-[0009]). Pickett, modified with the teachings of Frye, is hereinafter referred to as Pickett-Frye.

Claim 11 is rejected in view of the above rejection of claim 3. Claim 11 is essentially the same as claim 3, except that it sets forth the invention as a system rather than a method, as does claim 3. Claim 11 has an additional limitation, wherein said service processor receives and transmits management commands with said remote console through an Ethernet connection, which is taught by Pickett in col. 6, lines 41-49).

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Claim 21 is rejected in view of the above rejection of claim 12 and in view of Pickett-Frye's teachings of said management commands support in-band, out-of-band, and pre-boot modes of operation (As per col. 1, lines 49-55, for transmission of management commands Pickett employs time-division multiplexing, rather than frequency multiplexing, and therefore, teaches in-band communications. As per col. 43, lines 28-32, Pickett also teaches out-of-band management access. Support of pre-boot operation is taught by Frye in [0021]).

Claim 22 is rejected in view of the above rejection of claim 21. Claim 22 is essentially the same as claim 21, except that it sets forth the invention as a computer system rather than a method, as does claim 21.

5. Claims 10, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pickett in view of the U. S. Patent No. 6,654,816 B1, issued to Zaudtke et al., hereinafter Zaudtke.

Regarding claim 20, Picket teaches the method of claim 1.

Pickett does not explicitly teach an additional feature of method of claim 1, wherein said channel of said partition and said channel of said service processor are UART communication channels formatted for headless communication in compliance with headless firmware (Zaudtke, col. 11, lines 26-36).

However, Zaudtke, in analogous art, that relates to remote management and diagnostics of a headless computer, and more particularly to a system and method for retrieving, displaying and controlling information of a computer by a handheld or

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portable device or the like via a communication interface (Zaudtke, col. 1, lines 6-10 and col. 2, lines 52-55), teaches implementation of UART ports for communication with a headless system.

Therefore, it would have been obvious to one having ordinary skills in the art at the time the invention was made to incorporate the teachings of Zaudtke regarding implementation of UART ports for communication with a headless system into the teaching of Pickett, since at the time the invention was made UART was the most common type of circuit used in personal computer modems (Microsoft Computer Dictionary, 5th Edition, page 536). Pickett, modified with the teachings of Zaudtke, is hereinafter referred to as Pickett-Zaudtke.

Regarding claim 10, Picket-Zaudtke teaches the method of claim 8, wherein said multiplexer directs said communication through said channel and said channel is a UART communication port (Zaudtke, col. 11, lines 26-36).

Regarding claim 14, Picket-Zaudtke teaches the method of claim 12, wherein said channel is a UART communication channel (Zaudtke, col. 11, lines 26-36).

6. **Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

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Response to Arguments

7. Applicant's arguments with respect to claims 1-12, 14-16 and 18-22 have been considered but they are not persuasive.

The Applicant argues: *"In theory a switch / multiplexer may be used to route commands that emanate from a service processor. However, a switch / multiplexer is not a service processor in that it does not provide actual support and maintenance of the computer system as claimed by Applicant. There is no express teaching in the '791 for a service processor in the manner claimed by Applicant. As for whether the '791 patent inherently teaches a service processor, "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art."*

The Examiner respectfully disagrees and refers the Applicant to the abstract and column 3, lines 1-24, which, in part state the following: "In preferred embodiments, a TDM bus and a packet bus are intelligently bridged and managed, thereby enabling such multiple mode/protocol voice and data transmissions to be intelligently managed and controlled with a single, integrated system." Intelligent switch/mux 74 on Fig. 3 intelligently routes control, support and maintenance commands to headless computer system and provides this intelligent bridging, in addition enforcing Quality of Service standards and as such provides control, management and act as service processor. The word "inherent" has not been used in the previously issued Office Action that does

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not rely on inherency in rejection of any limitations of the instant application. As to the Applicant's statement that there is no express teaching in the '791 for a service processor in the manner claimed by Applicant, the Examiner would like to point out that the Applicant does not provide any specifics as to in what manner the service processor performs this management neither in the claims, nor in the specification.

Discussing rejection of claims 12, 15, 16, 18 and 19, the Applicant argues: "*The Examiner has not established a prima facie case of obviousness with respect to the aforesaid set of claims, there being no motivation to substitute the service processor of Applicant for the multiplexer of Pickett et al. '791 - especially since independent claims 12 and 16 distinctly claim both of these elements as separate elements in the claims. It is respectfully suggested that this rejection which does not contain the teachings of the claim elements is without merit and must be withdrawn.*"

Regarding the argument that the elements claimed in claim 12 and 16 are separate, the Examiner respectfully points out that it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skills in the art. See *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893). The reverse is also true. *In re Dulbert*, 129 U.S.P.Q 348.

In response to Applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was

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within the level of ordinary skill in the art at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The Examiner further refers the Applicants to the relevant sections of rejections of subject claims that clearly point out the motivation to combine the references in the manner they were combined, clearly showing that none of these motivations was borrowed from the Applicant's claims or disclosure.

Regarding rejection of claims 3, 10, 11, 14, 20, 21 and 22 the Applicant essentially repeats the arguments presented in relation to rejection of claims 1-2, 4-9, 12, 15, 16, 18 and 19. The Examiner's remarks made above are hereby incorporated by reference in response to these arguments.

Therefore, the Office respectfully maintains the rejection of all pending claims and makes it final.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vitali Korobov whose telephone number is 571-272-7506. The examiner can normally be reached on Mon-Friday 8a.m. - 4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571)272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

02/05/07
VAK


SALEH NAJJAR
SUPERVISORY PATENT EXAMINER

Vitali Korobov
Examiner
Art Unit 2155